

ELECTRONIC TUBE REFERENCE

6Z53P

Voltage - Pentode High Frequency (single) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
PENTODE

Wideband Russian high-frequency pentode for voltage amplification, combining approximately 19 mA/V transconductance with substantial signal-current capability.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	6.3 V / 180 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
TRANSCONDUCTANCE	0.019 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	3.5 W
MAXIMUM SCREEN DISSIPATION	0.4 W
MAXIMUM CATHODE CURRENT	24 mA
English-primary bilingual extraction; published ratings promoted where clear.	

PENTODE 653 BBLICOKOYaCTOTHBIN IUHPOKOMONochKIh neuTo 6K5311 The wide-band high-frequency 6XK53I1 pentode has NpeAHa3HaYeH LA YCWIEHHA HanpsKeHus. been designed for voitage amplification.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X Russian

Published test conditions and operating points. Values on this page are preserved as reported by this source.

195X RUSSIAN

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PENTODE	653	PENTODE 653
BBLICOKOYaCTOTHBIN IUHPOKOMONOCKIH neuTo	6	BBLICOKOYaCTOTHBIN IUHPOKOMONOCKIH neuTo 6K5311 The wide-band high-frequency 6XK53I1 pentode has
ϕ{	3	ϕ{9max Cxema coenaHeHHs 3NIEKTPOAOB € BhIBOAMHU:
Published electrical value	3	1 — ceTka mepBas; 2 — KaTOX M CETKA TPeThsl; 3 — MoHorpesa-
Published electrical value	7	2 — _ — TeNb; 4 — NOJOrpeBaTens; 5 — aHox; 6 — ceTka BTOPas; 7 —
Published electrical value	4	1 — grid 1; 2 — cathode and grid 3; 3 — heater; 4 — heater;
Published electrical value	7	5 — anode; 6 — grid 2; 7 — cathode
peHHeM 00	2.5	peHHeM 00 2,5 g. MHOrOKpaTHbIE yOapHBIE HATPY3KH
ϕ yckopenneM	35	ϕ yckopenneM 1o 35 g. Temmepatupa okpyxarowei cpe-
heater	6.3	heater ... 6.3
anode ... i	150	anode ... i 150
CETKH BTOPOM v\ittieieiiiieneieeennnn	150 V	CETKH BTOPOM v\ittieieiiiieneieeennnn. 150
grid	150	grid 2 L, 150
HBKAMMA ot tetiin e et ettt e e e	160125 mA	HBKAMMA ot tetiin e et ettt e e e 160125 Current, mA:
AHOMA &t et vinieeee e teiae e r e eananeennes	25	AHOMA &t et vinieeee e teiae e r e eananeennes 1314 heater ... i 160+25

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
CETKM BTOPOM ...ttt ittt et iieeeeannn, =	22	CETKM BTOPOM ...ttt ittt et iieeeeannn, =22 anode ...
ConpoTHBIEHHE B UEMH KAaTOOA	22	ConpoTHBIEHHE B UEMH KAaTOOA 41 ABTOMATHYECKOTO grid 2 e =22
CMEIEHHA, OM i ittt it	68	CMEIEHHA, OM i ittt it 68
Resistance in cathode circuit for automatic bias, Ohm	68 Ohm	Resistance in cathode circuit for automatic bias, Ohm 68
KpyTH	19 mA	KpyTH3Ha XapakTepnyTHKH, MA/B 19
Transconductance, mA/Y ottt	19 mA	Transconductance, mA/Y ottt 19
Inverse grid	-1.3 V	Inverse grid 1 current, at grid 1 voltage —1.3 V and
nepBoit –	-1.3	nepBoit —1,3 B H CONpOTHBIEHHH B ee Uenu
resistance	2 MOhm	resistance 0.5 MOhm in grid 1 circuit, gA =02
Published electrical value	0.2	0,5 MOM), MKA ittt i, =0,2
BXOIHAM o v et tee et ittt iie e i i	6 V	BXOIHAM o v et tee et ittt iie e i i 6,6+1,6 [0 o 10 APt 6.6t1.6
BBIXOOHAM .« o vttt e et ieein e e enaianennn	0.5	BBIXOOHAM .« o vttt e et ieein e e enaianennn 1 .7_1:%'3 +0.5
MPOXOMHAR ..ottt itiin e innnraaanannns =	0.02	MPOXOMHAR ..ottt itiin e innnraaanannns =0,02 transfer ..., . it =0.02
Dnektpuyeckue napaMeTpsl B Teverue	4	Dnektpuyeckue napaMeTpsl B Teverue 3000 4 skcry-
arauuu: Electrical parameters over	3000	arauuu: Electrical parameters over 3000 operating hours:
KPYTH	12 V	KPYTH3HA XapakTepHCTHKH, MA/B =12 transconductance, mA/V el =12
Published electrical value	1	00OpaTHbIA TOK CETKH NEPBOH, MKA =1 inverse grid I current, HA l =1
IlpenenbHble	3	IlpenenbHble 3HAYEHFH JOMYCTHMBIX Limit Values of Operating
HAKAMA L vnneeeieveen s	5.7	HAKAMA L vnneeeieveen s 7,0 5.7 heater ccovoiiiiinn.. 7.0 5.7
AHOMA .. ovvvinnenvnniinines	300	AHOMA .. ovvvinnenvnniinines 300 ANOAe . oo 300

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
axona npH	400	axona npH 3anepTolt famme 400 anode in cut-off valve 400
CeTKH BTOPOR	250	CeTKH BTOPOR 250 grd2 . 250
TIP% TIOMOXKHTeIBHOM NOTEH-tial	100	TIP% TIOMOXKHTeIBHOM NOTEH-tial ... 100
Published electrical value	100	1uajle NOKOTPEBATENA 100 with heater at negative poten-
fIPM OPTHLATE/ILHOM MOTetH:- tial o	100	fIPM OPTHLATE/ILHOM MOTetH:- tial o 100
Published electrical value	24 mA	 100 Cathode current, mA 24
Tok kaToma, MA	24 mA	Tok kaToma, MA 24
pacceuBaemMast aHOAOM	3.5	pacceuBaemMast aHOAOM 3,5 atanode 3.5
paccenBaemas cerko#t Bropoit	0.4	paccenBaemas cerko#t Bropoit 0,4 atgrid 2 ..., ..., 0.4
Published electrical value	17 mA	1T 17 lofgz, mA
L Uga=	170	L Uga=170V ! frt— % Ygr™ L
i NLT o	-1	i NLT o 6 ' -1V1
B.VAW g	2	B.VAW g 2 b
A)	5 A	A) 5 SR Y D OOU G Po S N e el
' A	4	' A7 F'/ng 4 itl e egly . __E__ . i{ po Sangs dengy si
e /I,/L]	140	e /I,/L] ,1!3/ 0 20 40 60 80 100 120 140 Ugy
UpY =	0	UpY =30 =25 -~20 -15 -0 -5 0
!l — Tok aHona	2	!l — Tok aHona; 2 — TOK CETKH BTOPOH; 3 — KpYTH3HA 1 — 1ok aHOza; 2 — TOK CeTKH BTOpO#
XapaKTePUCTHKH . Up=	150	XapaKTePUCTHKH . Up=6,3V, Upp=150V
Averaged characteristics: I — anode current	2	Averaged characteristics: I — anode current; 2 — grid 2 current
I — anode current	150	I — anode current; 2 — grid 2 current; 3 — trans- Un=63V, Upa=150V

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

